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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,790	12/29/2003	Walton Fehr	ISO1229AP	6443
22917	7590	06/02/2006	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			KAPLAN, HAL IRA	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/747,790

Applicant(s)

FEHR, WALTON

Examiner

Hal I. Kaplan

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/7/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: Paragraph 7, line 5 contains the abbreviation LIN. This should be written out before being used as an abbreviation. Paragraph 21, line 8 contains the phrase "term by limited". It appears this should be "term be limited". Paragraph 25, line 1 contains the phrase "has an ports". It appears this should be "has ports". Paragraph 28, lines 1-2 contain the phrase "supplied is primary". It appears this should be "supplied is a primary". Paragraph 28, line 5 contains the phrase "power out one". It appears this should be "power out to one". Paragraph 32, line 2 contains the phrase "turns on the in". It appears this should be "turns on the input".

Paragraph 34, line 5 contains the phrase "applied 402". It appears this should be "applied in step 402". Paragraph 34, line 7 contains the phrase "determine 404". It appears this should be "determine in step 404". Paragraph 34, line 10 contains the phrases "the no branch of 406" and "placed 408 in a standby mode". It appears these should be "the "no" branch of step 406" and "placed in a standby mode in step 408". Paragraph 34, lines 11-12 contain the phrases "the yes branch of 406" and "routed 410". It appears these should be "the "yes" branch of step 406" and "routed in step 410". Paragraph 34, line 14 contains the phrase "of the one shown". It appears this should be "of the type shown". Paragraph 34, line 18 contains the phrase "communicates 412". It appears this should be "communicates in step 412". Paragraph 34, line 20 contains the phrase "powering 414". It appears this should be "powering in

step 414". Paragraph 34, line 25 contains the phrase "others loads". It appears this should be "other loads".

Paragraph 26, line 4 refers to 304 as an "input control network", while paragraph 31, line 4 refers to 304 as a "sense and logic circuit". This is inconsistent, and it is not clear which is correct. Paragraph 30, line 6 incorrectly refers to drivers 222,224 as switches.

Appropriate correction is required.

Drawings

2. The drawings are objected to because of the following informalities: Figure 3 contains a "floating" wire with two ground terminals (shown above in/out 1 connection 302). This is not disclosed in the specification, and it has no apparent function because both ends of the wire are grounded. In addition, in/out 1 connection 302 and in/out 2 connection 318 are shown with different symbols.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "318" has been used to designate both the in/out 2 connection and an output switch module.
4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 416 in Figure 4. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet

should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claims 2-4, 6, 9-12, and 16-21 are objected to because of the following informalities: Claim 2 line 2, the phrase "the power management unit" lacks proper antecedent basis. Claim 2, line 3 contains the phrase "energy is a secondary". It appears this should be "energy is from a secondary". Claim 3 line 2, the phrase "the power management unit" lacks proper antecedent basis. Claim 3, line 3 contains the phrase "energy is a primary". It appears this should be "energy is from a primary". Claim 4, line 4 contains the phrase "an other". It appears this should be "another". Claim 6 line 3, the phrase "the first input" lacks proper antecedent basis. Claim 9, line 2 contains the phrase "to send a status". It appears this should be "to send a signal indicative of a status". Claim 10, lines 4 and 5 contain the phrase "the power is a primary". It appears this should be "the power is from a primary". Claim 11, line 2 contains the phrase "repeating applying". It appears this should be "applying". Claim 12, line 2 contains the phrase "the power is a secondary". It appears this should be "the power is from a secondary". Claim 12, line 3 contains the phrase "the power is the secondary". It appears this should be "the power is from the secondary".

Claim 16, line 1 contains the phrase "the determining". It appears this should be "determining". Claim 17, lines 9 and 10 contain the phrase "primary power source". It appears this should be "primary power". Claim 18 lines 1-2, the phrase "the plurality of power distribution nodes" lacks proper antecedent basis. Claim 19 lines 1-2, the phrase "the power of power sources" lacks proper antecedent basis. Claim 20 lines 1-2 and 4-5, the phrases "the plurality of power distribution nodes" and "the each of the plurality of power distribution nodes" lack proper antecedent basis. Claim 20, line 2 contains the phrase "an each". It appears this should be "each". Claim 20, line 4 contains the phrase "the each". It appears this should be "each". Claim 21 line 1, the phrase "the operational mode" lacks proper antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by the US patent application publication of Kim et al. (2004/0156220).

As to claim 1, Kim, drawn to a power supply, discloses a power management device read on the claimed device comprising: an input; and a logic unit (300) coupled to the input, wherein when the logic unit (300) determines a presence of an electrical

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energy at the input the logic unit (300) places the power management device in one of a standby mode and an active mode (see paragraph 20, lines 1-4; paragraph 21, lines 1-9; and paragraph 27, lines 10-12 and 16-18).

As to claim 2, the logic unit (300) places the power management device in the standby mode when the logic unit (300) determines the electrical energy is from a secondary power source (700) (see paragraph 24, lines 1-3 and paragraph 27, lines 20-23).

As to claim 3, the logic unit (300) places the power management device in the active mode when the logic unit (300) determines the electrical energy is from a primary power source (100) (see paragraph 21, lines 2-4 and paragraph 27, line 14).

As to claim 4, when the power management device is in the active mode, the power management device routes the primary power to an output port, the output port for connection to another power management device (400) in the power distribution network (see paragraph 21, lines 9-13).

As to claim 5, the power management device operates at a lower voltage when in the standby mode than when in the active mode (see paragraph 25, lines 1-8).

As to claim 6, the power management device of Kim further comprises a circuit (200), coupled between the input and the logic unit (300), responsive to the electrical energy at the input, the circuit (200) for supplying power to the logic unit (300) (see paragraph 23, lines 5-10).

8. Claims 1 and 5-9 are rejected under 35 U.S.C. 102(e) as being anticipated by the US patent of Stierle et al. (6,838,783).

As to claim 1, Stierle, drawn to a wake up system for electronic component supported on a vehicle, discloses a power management device for use in a power distribution network of a vehicle comprising: an input (45); and a logic unit (54) coupled to the input (45), wherein then the logic unit (54) determines a presence of an electrical energy at the input (45) the logic unit (54) places the power management device in one of a standby mode and an active mode (see column 3, lines 9-10 and 33-39).

As to claim 5, the power management device operates at a lower voltage when in the standby mode than when in the active mode (see column 1, lines 16-23).

As to claim 6, the power management device of Stierle further comprises a circuit (52), coupled between the input (45) and the logic unit (54), responsive to the electrical energy at the input (45), the circuit for supplying power to the logic unit (54) (see column 3, lines 33-34).

As to claim 7, the power management device of Stierle further comprises a communication unit (32) for receiving an instruction related to an operational mode wherein the power management device is responsive to the instruction (see column 3, lines 9-23).

As to claim 8, the operational mode comprises the active mode or the standby mode (see column 1, lines 55-59).

As to claim 9, the communication unit (32) is further operable to send a signal indicative of a status of the power management device (see column 3, lines 9-23).

9. Claims 10-14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by the US patent of Weiner (6,476,519).

As to claim 10, Weiner, drawn to a power back-up unit with low voltage disconnects that provide load shedding, discloses a method for sequentially starting a plurality of nodes in a power distribution network comprising: applying a power to a first node of the plurality of nodes (50A,50B,...,50n) (see column 3, lines 5-6); determining that the power is from a primary power source (12); and when the power is from a primary power source (12), routing the primary power to a second node of the plurality of nodes (50A,50B,...,50n) (see column 3, lines 5-10).

As to claim 11, the method further comprises applying the power to each of the plurality of nodes (50A,50B,...,50n) in the power distribution network (see column 3, lines 5-10).

As to claim 12, the method further comprises determining that the power is from a secondary power source (16) (see column 3, lines 31-35); and waiting in a standby mode (non-critical load 50B disconnected) when the power is from the secondary power source (16) (see column 4, lines 52-60).

As to claim 13, the method further comprises communicating with at least one of the first and second nodes to set an operating state in the at least one of the first and second nodes (see column 4, lines 54-60).

As to claim 14, the method further comprises communicating with at least one of the first and second nodes to monitor a condition of the at least one of the first and second nodes (see column 4, lines 54-60).

As to claim 16, determining that the power is the primary power further comprises communicating with a power source (12) to determine that the power source (12) is a supplier of the primary power (see column 4, lines 54-58).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weiner in view of the US patent of Chase et al. (4,593,349).

As to claim 15, Weiner discloses all of the claimed features, as set forth above, except for powering the plurality of loads in a sequential fashion. Chase, drawn to a power sequencer, discloses powering in a sequential fashion a plurality of loads to reduce an instantaneous change in power supplied by a power distribution network (see column 10, line 63 through column 11, line 1). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the technique of Chase to

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power up the loads of Weiner, in order to reduce the total power consumption of the device and increase its flexibility..

13. Claims 17, 18, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiner in view of Stierle.

As to claims 17 and 18, Weiner discloses all of the claimed features, as set forth above, except for a vehicle. Stierle discloses a vehicle arranged and constructed for using a power management distribution network. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the device of Weiner in a vehicle, in order to safely and efficiently disconnect non-critical loads upon a failure of the main power source.

As to claim 19, one of the plurality of power sources (12) is operable to communicate its type to a one of the plurality of power distribution nodes (50B).

As to claim 21, Weiner discloses active (non-critical loads connected) and standby (non-critical loads disconnected) operational modes (see column 3, lines 5-10 and column 4, lines 52-60).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The US patent to Koenig et al. (6,965,818) and US patent application publications to Christopher (2002/0091955), Park (2003/0009702), and Becker et al. (2004/0080212) disclose similar devices.

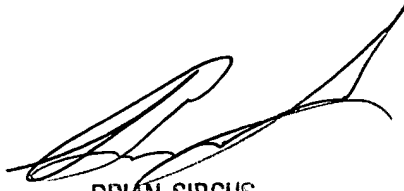
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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